

# 6

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RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/117,363A

DATE: 12/09/93  
TIME: 12:26:24

INPUT SET: S1102.raw

SEQUENCE LISTING

ENTERED

1  
2  
3 (1) General Information:  
4  
5 (i) APPLICANTS: Manoharan, Muthiah  
6 Phillip D. Cook  
7  
8 (ii) TITLE OF INVENTION: AMINE-DERIVATIZED NUCLEOSIDES AND  
9 OLIGONUCLEOSIDES  
10  
11 (iii) NUMBER OF SEQUENCES: 23  
12  
13 (iv) CORRESPONDENCE ADDRESS:  
14 (A) ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz  
15 and Norris  
16 (B) STREET: One Liberty Place - 46th Floor  
17 (C) CITY: Philadelphia  
18 (D) STATE: PA  
19 (E) COUNTRY: U.S.A.  
20 (F) ZIP: 19103  
21  
22 (v) COMPUTER READABLE FORM:  
23 (A) MEDIUM TYPE: Floppy disk  
24 (B) COMPUTER: IBM PC compatible  
25 (C) OPERATING SYSTEM: PC-DOS/MS-DOS  
26 (D) SOFTWARE: PatentIn Release #1.0, Version #1.25  
27  
28 (vi) CURRENT APPLICATION DATA:  
29 (A) APPLICATION NUMBER:  
30 (B) FILING DATE:  
31 (C) CLASSIFICATION:  
32  
33 (viii) ATTORNEY/AGENT INFORMATION:  
34 (A) NAME: Lucci, Joseph  
35 (B) REGISTRATION NUMBER: 33,307  
36 (C) REFERENCE/DOCKET NUMBER: ISIS-1169  
37  
38 (ix) TELECOMMUNICATION INFORMATION:  
39 (A) TELEPHONE: 215-568-3100  
40 (B) TELEFAX: 215-568-3439  
41  
42  
43  
44 (2) INFORMATION FOR SEQ ID NO:1:  
45  
46 (i) SEQUENCE CHARACTERISTICS:  
47 (A) LENGTH: 11 base pairs  
48 (B) TYPE: nucleic acid  
49 (C) STRANDEDNESS: single  
50 (D) TOPOLOGY: linear  
51

RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/117,363ADATE: 12/09/93  
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52 (ii) MOLECULE TYPE: DNA (genomic)  
53  
54 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:  
55  
56 GGCTGACTGC G 11  
57  
58  
59 (2) INFORMATION FOR SEQ ID NO:2:  
60  
61 (i) SEQUENCE CHARACTERISTICS:  
62 (A) LENGTH: 20 base pairs  
63 (B) TYPE: nucleic acid  
64 (C) STRANDEDNESS: single  
65 (D) TOPOLOGY: linear  
66  
67 (ii) MOLECULE TYPE: DNA (genomic)  
68  
69 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:  
70  
71 CTGTCTCCAT CCTCTTCACT 20  
72  
73  
74 (2) INFORMATION FOR SEQ ID NO:3:  
75  
76 (i) SEQUENCE CHARACTERISTICS:  
77 (A) LENGTH: 20 base pairs  
78 (B) TYPE: nucleic acid  
79 (C) STRANDEDNESS: single  
80 (D) TOPOLOGY: linear  
81  
82 (ii) MOLECULE TYPE: DNA (genomic)  
83  
84 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:  
85  
86 TTGCTTCCAT CTCCTCGTC 20  
87  
88  
89 (2) INFORMATION FOR SEQ ID NO:4:  
90  
91 (i) SEQUENCE CHARACTERISTICS:  
92 (A) LENGTH: 18 base pairs  
93 (B) TYPE: nucleic acid  
94 (C) STRANDEDNESS: single  
95 (D) TOPOLOGY: linear  
96  
97 (ii) MOLECULE TYPE: DNA (genomic)  
98  
99 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:  
100  
101 TGGGAGCCAT AGCGAGGC 18  
102

RAW SEQUENCE LISTING  
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103  
104 (2) INFORMATION FOR SEQ ID NO:5:  
105  
106 (i) SEQUENCE CHARACTERISTICS:  
107 (A) LENGTH: 20 base pairs  
108 (B) TYPE: nucleic acid  
109 (C) STRANDEDNESS: single  
110 (D) TOPOLOGY: linear  
111  
112 (ii) MOLECULE TYPE: DNA (genomic)  
113  
114 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:  
115  
116 CTGTCTCCAT CCTCTTCACT 20  
117  
118  
119 (2) INFORMATION FOR SEQ ID NO:6:  
120  
121 (i) SEQUENCE CHARACTERISTICS:  
122 (A) LENGTH: 16 base pairs  
123 (B) TYPE: nucleic acid  
124 (C) STRANDEDNESS: single  
125 (D) TOPOLOGY: linear  
126  
127 (ii) MOLECULE TYPE: DNA (genomic)  
128  
129 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:  
130  
131 TCCAGGTGTC CGCATC 16  
132  
133  
134 (2) INFORMATION FOR SEQ ID NO:7:  
135  
136 (i) SEQUENCE CHARACTERISTICS:  
137 (A) LENGTH: 17 base pairs  
138 (B) TYPE: nucleic acid  
139 (C) STRANDEDNESS: single  
140 (D) TOPOLOGY: linear  
141  
142 (ii) MOLECULE TYPE: DNA (genomic)  
143  
144 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:  
145  
146 GGACCGGAAG GTACGAG 17  
147  
148  
149 (2) INFORMATION FOR SEQ ID NO:8:  
150  
151 (i) SEQUENCE CHARACTERISTICS:  
152 (A) LENGTH: 17 base pairs  
153 (B) TYPE: nucleic acid

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154 (C) STRANDEDNESS: single  
155 (D) TOPOLOGY: linear  
156  
157 (ii) MOLECULE TYPE: DNA (genomic)  
158  
159 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:  
160  
161 CCTGGCCTTC CATGCTC 17  
162  
163  
164 (2) INFORMATION FOR SEQ ID NO:9:  
165  
166 (i) SEQUENCE CHARACTERISTICS:  
167 (A) LENGTH: 17 base pairs  
168 (B) TYPE: nucleic acid  
169 (C) STRANDEDNESS: single  
170 (D) TOPOLOGY: linear  
171  
172 (ii) MOLECULE TYPE: RNA (genomic)  
173  
174 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:  
175  
176 CCUGGCCUUC CAUGCUC 17  
177  
178  
179 (2) INFORMATION FOR SEQ ID NO:10:  
180  
181 (i) SEQUENCE CHARACTERISTICS:  
182 (A) LENGTH: 12 base pairs  
183 (B) TYPE: nucleic acid  
184 (C) STRANDEDNESS: single  
185 (D) TOPOLOGY: linear  
186  
187 (ii) MOLECULE TYPE: DNA (genomic)  
188  
189 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:  
190  
191 CCCAGGCUCA GA 12  
192  
193  
194 (2) INFORMATION FOR SEQ ID NO:11:  
195  
196 (i) SEQUENCE CHARACTERISTICS:  
197 (A) LENGTH: 12 base pairs  
198 (B) TYPE: nucleic acid  
199 (C) STRANDEDNESS: single  
200 (D) TOPOLOGY: linear  
201  
202 (ii) MOLECULE TYPE: DNA (genomic)  
203  
204 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/117,363ADATE: 12/09/93  
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205  
206 GAGCUCCCAG GC 12  
207  
208  
209 (2) INFORMATION FOR SEQ ID NO:12:  
210  
211 (i) SEQUENCE CHARACTERISTICS:  
212 (A) LENGTH: 12 base pairs  
213 (B) TYPE: nucleic acid  
214 (C) STRANDEDNESS: single  
215 (D) TOPOLOGY: linear  
216  
217 (ii) MOLECULE TYPE: DNA (genomic)  
218  
219 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:  
220  
221 CAUGCUGCAGCC 12  
222  
223  
224 (2) INFORMATION FOR SEQ ID NO:13:  
225  
226 (i) SEQUENCE CHARACTERISTICS:  
227 (A) LENGTH: 20 base pairs  
228 (B) TYPE: nucleic acid  
229 (C) STRANDEDNESS: single  
230 (D) TOPOLOGY: linear  
231  
232 (ii) MOLECULE TYPE: DNA (genomic)  
233  
234 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:  
235  
236 GCCTTTCGCG ACCCAACACU 20  
237  
238  
239 (2) INFORMATION FOR SEQ ID NO:14:  
240  
241 (i) SEQUENCE CHARACTERISTICS:  
242 (A) LENGTH: 11 base pairs  
243 (B) TYPE: nucleic acid  
244 (C) STRANDEDNESS: single  
245 (D) TOPOLOGY: linear  
246  
247 (ii) MOLECULE TYPE: DNA (genomic)  
248  
249 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:  
250  
251 GCGTGUCTGC G 11  
252  
253  
254 (2) INFORMATION FOR SEQ ID NO:15:  
255

RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/117,363ADATE: 12/09/93  
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256 (i) SEQUENCE CHARACTERISTICS:  
257 (A) LENGTH: 18 base pairs  
258 (B) TYPE: nucleic acid  
259 (C) STRANDEDNESS: single  
260 (D) TOPOLOGY: linear  
261  
262 (ii) MOLECULE TYPE: DNA (genomic)  
263  
264 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:  
265 UGGGAGCCAT AGCGAGGC 18  
266  
267  
268  
269 (2) INFORMATION FOR SEQ ID NO:16:  
270  
271 (i) SEQUENCE CHARACTERISTICS:  
272 (A) LENGTH: 18 base pairs  
273 (B) TYPE: nucleic acid  
274 (C) STRANDEDNESS: single  
275 (D) TOPOLOGY: linear  
276  
277 (ii) MOLECULE TYPE: DNA (genomic)  
278  
279 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:  
280 TGGGAGCCAU AGCGAGGC 18  
281  
282  
283  
284 (2) INFORMATION FOR SEQ ID NO:17:  
285  
286 (i) SEQUENCE CHARACTERISTICS:  
287 (A) LENGTH: 20 base pairs  
288 (B) TYPE: nucleic acid  
289 (C) STRANDEDNESS: single  
290 (D) TOPOLOGY: linear  
291  
292 (ii) MOLECULE TYPE: DNA (genomic)  
293  
294 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:  
295 UCTGAGTAGC AGAGGAGCTC 20  
296  
297  
298  
299 (2) INFORMATION FOR SEQ ID NO:18:  
300  
301 (i) SEQUENCE CHARACTERISTICS:  
302 (A) LENGTH: 21 base pairs  
303 (B) TYPE: nucleic acid  
304 (C) STRANDEDNESS: single  
305 (D) TOPOLOGY: linear  
306

RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/117,363ADATE: 12/09/93  
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307 (ii) MOLECULE TYPE: DNA (genomic)  
308  
309 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:  
310  
311 UGCCCCAAGCT GGCATCCGTC A 21  
312  
313  
314 (2) INFORMATION FOR SEQ ID NO:19:  
315  
316 (i) SEQUENCE CHARACTERISTICS:  
317 (A) LENGTH: 22 base pairs  
318 (B) TYPE: nucleic acid  
319 (C) STRANDEDNESS: single  
320 (D) TOPOLOGY: linear  
321  
322 (ii) MOLECULE TYPE: DNA (genomic)  
323  
324 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:  
325  
326 UGCGTTTGCT CTTCTTCTTG CG 22  
327  
328  
329 (2) INFORMATION FOR SEQ ID NO:20:  
330  
331 (i) SEQUENCE CHARACTERISTICS:  
332 (A) LENGTH: 20 base pairs  
333 (B) TYPE: nucleic acid  
334 (C) STRANDEDNESS: single  
335 (D) TOPOLOGY: linear  
336  
337 (ii) MOLECULE TYPE: DNA (genomic)  
338  
339 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:  
340  
341 UGCATCCCCC AGGCCACCAT 20  
342  
343  
344 (2) INFORMATION FOR SEQ ID NO:21:  
345  
346 (i) SEQUENCE CHARACTERISTICS:  
347 (A) LENGTH: 20 base pairs  
348 (B) TYPE: nucleic acid  
349 (C) STRANDEDNESS: single  
350 (D) TOPOLOGY: linear  
351  
352 (ii) MOLECULE TYPE: DNA (genomic)  
353  
354 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:  
355  
356 UCCCGCCTGT GACATGCATT 20  
357

RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/117,363ADATE: 12/09/93  
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INPUT SET: S1102.raw

358  
359 (2) INFORMATION FOR SEQ ID NO:22:  
360  
361 (i) SEQUENCE CHARACTERISTICS:  
362 (A) LENGTH: 20 base pairs  
363 (B) TYPE: nucleic acid  
364 (C) STRANDEDNESS: single  
365 (D) TOPOLOGY: linear  
366  
367 (ii) MOLECULE TYPE: DNA (genomic)  
368  
369 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:  
370  
371 GUTCTCGCTG GTGAGTTTCA 20  
372  
373  
374  
375 (2) INFORMATION FOR SEQ ID NO:23:  
376  
377 (i) SEQUENCE CHARACTERISTICS:  
378 (A) LENGTH: 19 base pairs  
379 (B) TYPE: nucleic acid  
380 (C) STRANDEDNESS: single  
381 (D) TOPOLOGY: linear  
382  
383 (ii) MOLECULE TYPE: DNA (genomic)  
384  
385 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:  
386  
387 UUGGGAGCCA TAGCGAGGC 19



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**SEQUENCE VERIFICATION REPORT**  
**PATENT APPLICATION US/08/117,363A**

DATE: 12/09/93  
TIME: 12:27:06

*INPUT SET: S1102.raw*

Line

Error

Original Text

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**SEQUENCE MISSING ITEM REPORT**  
**PATENT APPLICATION US/08/117,363A**

DATE: 12/09/93  
TIME: 12:27:06

*INPUT SET: S1102.raw*

APPLICATION NUMBER  
FILING DATE  
PRIOR APPLICATION DATA

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**SEQUENCE CORRECTION REPORT**  
**PATENT APPLICATION US/08/117,363A**

DATE: 12/09/93  
TIME: 12:27:07

*INPUT SET: S1102.raw*

Line	Original Text	Corrected Text
5	(i) APPLICANTS: Manoharan, Muthiah	(i) APPLICANT: Manoharan, Muthiah